APPENDIX B—MOST SIGNIFICANT DISPUTED CLAIM TERMS FOR CONSTRUCTION

A. U.S. Patent No. RE 43,633

U.S. PATENT NO. RE 43,633				
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
1. "beginning position address of [a] textual source material stored in an electronic database"	'633 patent: 17, 62, 101, 146	"first character position of a textual source material" Intrinsic Evidence: ('633 Patent, Fig. 1 and 2 and 5:15-34 ("A text file 10 and/or a multimedia source 14, consisting of an audio/video file 11 and synchronized text 13, which may include sound, images, and/ or video is edited during construction of a linked text database by a visual editor 19 that used to build a wordified database 20. The database 20 sources a grammar parser 23 and a link engine 22 that builds an index 21 which, in turn, locates each textual and audio/video reference in the source material. The index provides a location for each reference in a database 12 that includes a relational database engine 15, and linkable entities, such as text references 16, audio references 17, graphic references 18, and the like. The link engine 22 outputs the selected text to a word list 28 derived from the	No construction necessary or, in the alternative: "the address at which source material starts in an electronic database" Intrinsic Evidence: '633 Patent, 7:30-49; U.S. Patent No. 5,822,720 Prosecution History, Jan. 16, 1996 Response to Office Action, pp. 7- 8, 10-11; April 2, 1996 Final Rejection, p. 2-3; May 28, 1996 Response to Office Action, pp. 2-7; July 8, 1996 Response to Office Action, pp. 6-7. U.S. Patent No. 5,146,552 to Cassorla, Abstract, 1:55-57, 2:23-25, 2:36-44; 6:14-42; 8:27-38; Fig. 2, 3, 6. Extrinsic Evidence: Supplemental Declaration of Jon Weissman (¶¶ 4-13), Exhibits 1-7. Materials from prior Sentius litigations, including: Sentius Corp. v. Flyswat Inc., No. C 00- 2233 (N.D. Cal.), Claim Construction Order (pp. 20, 35)	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		input text file 10 and/or audio/video information 14, and also outputs the reference information 24, consisting of linkable entities 25, 26, 27, which are derived from the indexed database 12. The indexor/viewer 29 creates a multimedia resource 30, such as a file 33 that was processed as described above to produce a data resource 34, an offset index 35, and linked entities 36 to the data resource for access by the user."); 6:48-64 ("FIG. 2 is a flow diagram in which the mechanism for indexing and linking text to external references is shown according to the invention. To find a reference to a particular word or other selected entry displayed on the screen, the user clicks the text that is viewed with a pointing device, such as a mouse (200). The click position is determined and used to calculate an offset value within the text (200). In the example shown in FIG. 2, the user clicks at a particular location, e.g. horizontal and vertical coordinates 100 and 75, respectively, and an offset value of 25 is returned. The offset value is compared to the start and end position indices stored in a look-up table (201, 202). The	Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Opening Claim Construction Brief of Sentius (pp. 2, 8-9). Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Joint Claim Construction Statement from Flyswat Litigation, Ex. A Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Summary Judgement Order (p. 14) and related briefing. Sentius v. Blackberry, No. 2:16-cv-00773 (E.D. Tex.), Joint Claim Construction Chart Inventor and expert depositions transcripts from prior litigations.	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		link between the selected text and the external reference is resolved (203), and the external reference is retrieved and displayed to the user (204). In the example of FIG. 2 an offset of 25 is located at the look-up table location having a start point of 20 and an end point of 27 and is linked to text located at position 200.");		
		7:3-49 ("Word Cuts. The word cutting process is accomplished using a simple visual editor, for example a point and click system using a pointing device, such as a mouse. The process divides the text into the individual components of text that are linked with the additional reference material. The original text is provided by a publisher in electronic form in a raw binary text format (e.g. an ASCII text file or other word processor file). This text is then divided up into the		
		component word or phrases in preparation for the next step. Compilation. After linking, the text and references are compiled. During compilation, the cut text is reassembled to create an image of the text that the end user sees. At this point additional formatting may be applied to the text for		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		final display. Indices of the component		
		words and phrases are built with links to		
		the reference material and duplicate		
		references are consolidated to conserve		
		memory and storage requirements. A		
		key feature of the system format is the		
		method by which the original book text		
		is indexed and linked with the external		
		references. During the compile process		
		an image of the text is created. When the		
		image is created, the cuts are indexed		
		based upon the position offset from the		
		beginning of the text. The start and end		
		points of the cut text are recorded in a		
		look-up table along with the links to		
		external references. The number and		
		type of links for any component is		
		dynamic. This means that a single entry		
		could have several different references		
		attached to it, each containing different		
		forms of data.		
		The user interacts with the electronic		
		book using a pointing device. When the		
		user "clicks" within the text image, the		
		location of the pointer is determined.		
		The location is converted into a position		
		offset from the beginning of the text and		
		used to determine which component		
		word or phrase was selected. The		
		process involves comparing the offset		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		with the start and end values stored in the look-up table as discussed above in connection with FIG. 2. When the offset value falls between a component's start and end points, a match is made and the external references can be resolved.")		
		Extrinsic Evidence: Sentius v BlackBerry, No. 2:16 -cv- 00773 (E.D. Tex.) Agreed Claim Construction Order, p. 1 (Doc. 87)		
		Declaration of V. Madisetti, ¶27, 32, 60-64, 81, 99, 110-112.		
		Supplemental Declaration of V. Madisetti, ¶¶ 4-11.		
		Bookman Deposition, Vol. II (Exh. 28) 331:10-24.		
		Madisetti Deposition (Exh. 29) 36:25-40:23, 42:23-43, 51:12-23, 56:14-57:5, 63:16-21		

Sentius' Impact Statement: Sentius does not view the variance in the parties' proposed constructions as impactful on the issue of infringement of the claims in the '633 Patent where this term appears.

Zoho's Impact Statement: Adopting Zoho's construction for the address-related terms will establish that Zoho does not infringe the patents because it does not use byte-related offsets to find words or characters in the text.

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
2. "starting point address"	'633 patent: 17, 22, 62, 101,	"starting character position"	"an offset value from the beginning position address to the starting point"	
"ending point address"	106, 146	"ending character position"	"an offset value from the beginning position address to the ending point"	
		Intrinsic Evidence:	Intrinsic Evidence:	
		('633 Patent, Fig. 1 and 2 and 5:15-34 ("A text file 10 and/or a multimedia source 14, consisting of an audio/video file 11 and synchronized text 13, which may include sound, images, and/ or video is edited during construction of a linked text database by a visual editor 19 that used to build a wordified database 20. The database 20 sources a grammar parser 23 and a link engine 22 that builds an index 21 which, in turn, locates each textual and audio/video reference in the source material. The index provides a location for each reference in a database 12 that includes a relational database engine 15, and linkable entities, such as text references 16, audio references 17, graphic references 18, and the like. The link engine 22 outputs the selected text to a word list 28 derived from the input text file 10 and/or audio/video information 14, and also outputs the	'633 patent: 6:55-67, 7:30-49; U.S. Patent No. 5,822,720 Prosecution History, Jan. 16, 1996 Response to Office Action, pp. 7-8, 10-11; April 2, 1996 Final Rejection, p. 2-3; May 28, 1996 Response to Office Action, pp. 2-7; July 8, 1996 Response to Office Action, pp. 6-7. U.S. Patent No. 5,146,552 to Cassorla, Abstract, 1:55-57, 2:23-25, 2:36-44; 6:14-42; 8:27-38; Fig. 2, 3, 6. Extrinsic Evidence: Supplemental Declaration of Jon Weissman (¶¶ 4-13), Exhibits 1-7. Materials from prior Sentius litigations, including: Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Claim Construction Order	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		reference information 24, consisting of linkable entities 25, 26, 27, which are derived from the indexed database 12. The indexor/viewer 29 creates a multimedia resource 30, such as a file 33 that was processed as described above to produce a data resource 34, an offset index 35, and linked entities 36 to the data resource for access by the user."); 6:48-64 ("FIG. 2 is a flow diagram in which the mechanism for indexing and linking text to external references is shown according to the invention. To find a reference to a particular word or other selected entry displayed on the screen, the user clicks the text that is viewed with a pointing device, such as a mouse (200). The click position is determined and used to calculate an offset value within the text (200). In the example shown in FIG. 2, the user clicks at a particular location, e.g. horizontal and vertical coordinates 100 and 75, respectively, and an offset value of 25 is returned. The offset value is compared to the start and end position indices stored in a look-up table (201, 202). The link between the selected text and the external reference is resolved (203), and	Sentius v. Blackberry, No. 2:16-cv-00773 (E.D. Tex.), Joint Claim Construction Chart (Dkt. 73) Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Summary Judgment Order and related briefing. Inventor and expert depositions transcripts from prior litigations.	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		the external reference is retrieved and displayed to the user (204). In the example of FIG. 2 an offset of 25 is located at the look-up table location having a start point of 20 and an end point of 27 and is linked to text located at position 200.");		
		7:3-49 ("Word Cuts. The word cutting process is accomplished using a simple visual editor, for example a point and click system using a pointing device,		
		such as a mouse. The process divides the text into the individual components of text that are linked with the additional reference material. The original text is provided by a publisher in electronic		
		form in a raw binary text format (e.g. an ASCII text file or other word processor file). This text is then divided up into the component word or phrases in		
		preparation for the next step. Linking. The linking process takes the text after the word cut process and links it to an external reference. The database		
		20 sources a grammar parser 23 and a link engine 22 that builds an index 21 which, in turn, locates each textual and audio/video reference in the source material. In the case of language		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		learning, the component words and phrases are linked to a foreign language dictionary. In other cases, links may be made to 20 other reference materials, such as graphics and/or sound.		
		Extrinsic Evidence: Declaration of V. Madisetti, ¶27-30,		
		32-35, 60, and 65-70. Supplemental Declaration of V. Madisetti, ¶¶ 4-12.		
		Bookman Deposition, Vol. II (Exh. 28) 331:10-24.		
		Madisetti Deposition (Exh. 29) 36:25-40:23, 42:23-43, 51:12-23, 56:14-57:5, 63:16-21		
3. The inclusion of offset	value (with Zoho's p	d construction of this term includes the term roposed construction of that term) in the co on the issue of infringement of the claims in	nstruction of the starting and ending point	
		construction for the address-related terms wated offsets to find words or characters in the		
3. "offset value"	'633 patent: 17, 21, 22, 62,	"a value or distance from a beginning point"	"distance in bytes from a beginning point"	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
	101, 105, 106, 146	Dictionary/Treatise Definitions:	Intrinsic Evidence:	
		Personal Computer Dictionary, p. 346, offset value "(1) Refers to a value added to a base address to produce a second address. For example, if B represents address 100, then the expression, 9+5 would signify the address 105. The 5 in the expression is the offset. Specifying addresses using an offset is called relative addressing because the resulting address is relative to some other point. Another word for offset is	'633 Patent, Fig. 2, 6:48-67, 7:30-49; U.S. Patent No. 5,822,720 Prosecution History, Jan. 16, 1996 Response to Office Action, pp. 7-8, 10-11; April 2, 1996 Final Rejection, p. 2-3; May 28, 1996 Response to Office Action, pp. 2-7; July 8, 1996 Response to Office Action, pp. 6-7.	
			U.S. Patent No. 5,146,552 to Cassorla, Abstract, 1:55-57, 2:23-25, 2:36-44; 6:14-42; 8:27-38; Fig. 2, 3, 6.	
		displacement."	Extrinsic Evidence:	
		Intrinsic Evidence: ('633 Patent, Fig. 1 and 2 and 5:26-49 ("The link engine 22 outputs the	Supplemental Declaration of Jon Weissman (¶¶ 4-13), Exhibits 1-7.	
			Materials from prior Sentius litigations including:	
		selected text to a word list 28 derived from the input text file 10 and/or audio/video information 14 , and also	Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Claim Construction Order	
		outputs the reference information 24, consisting of linkable entities 25, 26, 27, which are derived from the indexed	Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Summary Judgement Order and related briefing.	
		database 12. The indexor/viewer 29 creates a multi-media resource 30, such as a file 33 that was processed as	Inventor and Expert Depositions Transcripts, including: June 28, 2001	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		-		
		7:22-49 ("Compilation. After linking, the text and references are compiled. During compilation, the cut text is		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		reassembled to create an image of the text that the end user sees. At this point additional formatting may be applied to the text for final display. Indices of the component words and phrases are built with links to the reference material and duplicate references are consolidated to conserve memory and storage requirements. A key feature of the system format is the method by which the original book text is indexed and linked with the external references. During the compile process an image of the text is created. When the image is created, the cuts are indexed based upon the position offset from the beginning of the text. The start and end points of the cut text are recorded in a look-up table along with the links to external references. The number and type of links for any component is dynamic. This means that a single entry could have several different references attached to it, each containing different forms of data. The user interacts with the electronic book using a pointing device. When the user "clicks" within the text image, the location of the pointer is determined. The location is converted into a position		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		offset from the beginning of the text and used to determine which component word or phrase was selected. The process involves comparing the offset with the start and end values stored in the look-up table as discussed above in connection with FIG. 2. When the offset value falls between a component's start and end points, a match is made and the external references can be resolved.")		
		Extrinsic Evidence:		
		Sentius v BlackBerry Agreed Claim Construction Order, p.1 ("a value from a beginning point")		
		Declaration of V. Madisetti, ¶27, 32, 34-37, 60, and 71.		
		Supplemental Declaration of V. Madisetti, ¶¶ 4-11.		
		Bookman Deposition, Vol. II (Exh. 28) 331:10-24.		
		Madisetti Deposition (Exh. 29) 36:25-40:23, 42:23-43, 51:12-23, 56:14-57:5, 63:16-21		

U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
Sentius' Impact Statement infringement of claims in		s that the construction of this term will have this term appears.	we a substantial impact on the issue of
		construction for the address-related terms wated offsets to find words or characters in the	
4. "image of the source material" / "source material image"	'633 patent: 17, 101	"an image of the text displayed on a computer screen derived from the source material"	"an image displayed on a computer screen derived from the text created by reassembly of the cut pieces of textual source material"
		Intrinsic Evidence:	Intrinsic Evidence:
		5:15-20 ("A text file 10 and/or a multimedia source 14, consisting of an audio/video file 11 and synchronized text 13, which may include sound, images, and/or video is edited during construction of a linked text database by a visual editor 19 that used to build a	'633 Patent, 7:14-50; U.S. Patent No. 5,822,720 Prosecution History, Jan. 16, 1996 Response to Office Action, pp. 7-8, 10-11; April 2, 1996 Final Rejection, p. 2-3; May 28, 1996 Response to Office Action, pp. 2-7; July 8, 1996 Response to Office Action, pp. 6-7.
		wordified database 20.")	Extrinsic Evidence:
		7:20-43 ("In other cases, links may be	Materials from prior Sentius litigations including:
		made to other reference materials, such as graphics and/or sound. Compilation	Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Claim Construction Order (pp. 20-25)
		After linking the text references are compiled. During compilation, the cut text is reassembled to create an image of the text that the end user sees. At this	Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Opening Claim Construction Brief of Sentius (pp. 8-9).

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		point additional formatting may be applied to the text for final display. Indices of the component words and phrases are built with links to the reference material and duplicate references are consolidated to conserve memory and storage requirements.	Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Summary Judgement Order and related briefing. Inventor and Expert Depositions Transcripts.	
		A Key feature of the system format is the method by which the original book text is indexed and linked with the external references. During the compile process an image of the text is created. When the image is created, the cuts are indexed based upon the position offset from the beginning of the text. The start and end points of the cut text are recorded in a look-up table along with the links to external references. The number and type of links for any component is dynamic. This means that a single entry could have several different references attached to it, each containing different forms of data.		
		The user interacts with the electronic book using a pointing device. When the user "clicks" within the text image, the location of the pointer is determined. The location is converted into a position offset from the beginning of the text and		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		used to determine which component word or phrase was selected.")	
		Extrinsic Evidence:	
		Declaration of V. Madisetti , ¶ 34, 60, 62, 64, 73-75, 76, 82, 99, 103-105, 107-109, 116.	
Sentius' Impact Statemen infringement of claims in the		that the construction of this term will have this term appears.	a slight to moderate impact on the issue of
		construction will establish that Zoho does n y of image portions as claimed.	ot infringe the '633 patent because it does
5. "look-up table"	'633 patent: 17, 21, 62, 101,	"a data structure that contains values for searching or retrieving"	"an array or matrix of data that contains values for searching"
	105, 146		Intrinsic Evidence:
		Dictionary/Treatise Definitions: Christensson, P. (2007, October 17) Array Definition, "An array is a data structure that contains a group of elements. Typically, these elements are all of the same data type, such as an integer or string. Arrays are commonly used in computer programs to organize data so that a related set of values can be easily sorted or searched. For example, a search engine may use an array to store Web pages found in a search performed	'633 Patent, Fig. 2, 6:48-67, 7:30-49, U.S. Patent No. 5,822,720 Prosecution History, Jan. 16, 1996 Response to Office Action, pp. 7-8, 10-11; April 2, 1996 Final Rejection, p. 2-3; May 28, 1996 Response to Office Action, pp. 2-7; July 8, 1996 Response to Office Action, pp. 6-7. Extrinsic Evidence:

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		by the user. When displaying the results, the program will output one element of the array at a time. This may be done for a specified number of values or until all the values stored in the array have been output. Microsoft Press Computer Dictionary, The Comprehensive Standard for Business, School, Library and Home, (1991) pgs. 216-217, lookup definition, "A function, often built into spreadsheet	And Supporting Evidence Materials from prior Sentius litigations, including: Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Claim Construction Order Sentius Corp. v. Flyswat Inc., No. C 00-2233 (N.D. Cal.), Summary Judgement Order and related briefing. Sentius v. Blackberry, No. 2:16-cv-00773 (E.D. Tex.), Joint Claim Construction Chart (Dkt. 73)	
		programs, in which a previously constructed table of values called a lookup table is searched for a desired item of information. A lookup table, similar to a tax table, consists of rows and columns of data. A lookup function	Inventor and expert depositions transcripts from prior litigations. The Computer Desktop Encyclopedia, p. 527 (2nd ed. 1999)	
		examines the table either horizontally or vertically and then retrieves the data (income tax, for example) that corresponds to the argument (head of household, \$40,000 annual income) specified as part of the lookup function.	McGraw-Hill, Dictionary of Scientific and Technical Terms, p. 1168 (5th ed. 1994) Microsoft Press, Computer Dictionary: The Comprehensive Standard for Business, School, Library, and Home, pp. 216-17 (1991).	
		Intrinsic Evidence: ('633 Patent, Figures 1 and 2) 6:48-67 ("FIG. 2 is a flow diagram in which the mechanism for indexing and	Alan Freedman, The Computer Glossary: The Complete Illustrated Dictionary, p. 228 (7th ed. 1995).	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		linking text to external references is shown according to the invention. To find a reference to a particular word or other selected entry displayed on the screen, the user clicks the text that is viewed with a pointing device, such as a mouse (200). The click position is determined and used to calculate an offset value within the text (200). In the example shown in FIG. 2, the user clicks at a particular location, e.g. horizontal and vertical coordinates 100 and 75, respectively, and an offset value of 25 is returned. The offset value is compared to the start and end position indices stored in a look-up table (201, 202). The link between the selected text and the external reference is resolved (203), and the external reference is retrieved and displayed to the user (204). In the example of FIG. 2 an offset of 25 is located at the look-up table location having a start point of 20 and an end point of 27 and is linked to text located at position 200. As can be seen from the look-up table (202), the link may be to text, sound, pictures, and video. In the example, the text linkage is to the English language word "Japanese economy".");		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		7:30-49 ("A key feature of the system format is the method by which the original book text is indexed and linked with the external references. During the compile process an image of the text is created. When the image is created, the cuts are indexed based upon the position offset from the beginning of the text. The start and end points of the cut text are recorded in a look-up table along with the links to external references. The number and type of links for any component is dynamic. This means that a single entry could have several different references attached to it, each containing different forms of data. The user interacts with the electronic book using a pointing device. When the user "clicks" within the text image, the location of the pointer is determined. The location is converted into a position offset from the beginning of the text and used to determine which component word or phrase was selected. The process involves comparing the offset with the start and end values stored in the look-up table as discussed above in connection with FIG. 2. When the		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		offset value falls between a component's start and end points, a match is made and the external references can be resolved.");		
		8:29-32 ("The electronic viewer module provides the following pulldown menus: File, Edit, Words, View. The File Menu includes: 1. Open (opens up a book for reading)"); and		
		8:39-48 ("The Edit Menu Includes: 1. Undo (undoes a previously deleted entry in the personal dictionary fields); 2. Cut (cuts a highlighted block of text in the personal dictionary fields); 3. Copy (copies the selected text into the clipboard in either the electronic viewer module or the personal dictionary); and 4. Paste (pastes the copied text into the target field in the personal dictionary)").		
		Extrinsic Evidence:		
		Declaration of V. Madisetti, ¶30, 35, 37, 47, 49, 60, 66, and 72.		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		that the construction of this term could pote 633 Patent depending on the definitions of a	
"look-up table" to those wh	aich are actually a "t	construction will limit the set of structures the able" rather than an arbitrary data structure lible structure does not meet the other claim	. This will establish that Zoho does not
6. "means for compiling the source material image from at least the plurality of discrete pieces"	'633 patent: 19, 103	Function: "compiling the source material image from at least the plurality of discrete pieces" Structure: "a computer having a visual editor and user interface programmed to perform the recited function, and equivalents thereof" Intrinsic Evidence: ('633 Patent, Figures 1, 2 and 3; and 5:34-65; ("A user interface 32 to the system includes an electronic viewer 43 that runs along with the system application program 42 and provides the following functional elements: index management 37, user display 38, a table of contents 39, a pop-up display 40, and a personal dictionary 41. The electronic viewer module is used to view and read the electronic books provided with the language learning system. The module includes the	Subject to §112 ¶ 6. Function (agreed): "compiling the source material image from at least the plurality of discrete pieces" Structure: None/indefinite Extrinsic Evidence: Declaration of Jon Weissman (¶¶ 71-77)

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		following features: 1. One-click, pop-up information for all words containing foreign language words; 2. A word display palette; 3. A contents menu for each book; 4. Search functions; 5. Selectable browse and edit modes; and 6. The ability to copy words and associated information into personal dictionary. The personal dictionary is a relational database that is optimized to manage and study words. Unlike electronic dictionaries, where only the word entries of the dictionary are searchable, the personal dictionary of the system herein allows one to search on each of eight or more keys associated with a word. The following functions are supported by the personal dictionary: 1. Display of words in an easy to read, easy to access format; 2. Full relational database capabilities for the following: the word, the pronunciation, English reference, notes, category, source, priority, and review date; 3. Search capabilities for any item; 4. Capabilities to store an unlimited number of words; 5. A flash word feature to allow self-testing in sorted or random order; and 6. Capabilities to	

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		6:48-57, ("FIG. 2 is a flow diagram in which the mechanism for indexing and linking text to external references is shown according to the invention. To find a reference to a particular word or other selected entry displayed on the screen, the user clicks the text that is viewed with a pointing device, such as a mouse (200). The click position is determined and used to calculate an offset value within the text (200). In the example shown in FIG. 2, the user clicks at a particular location, e.g. horizontal and vertical coordinates 100 and 75, respectively, and an offset value of 25 is returned.")		
		7:22-49 ("Compilation. After linking, the text and references are compiled. During compilation, the cut text is reassembled to create an image of the text that the end user sees. At this point additional formatting may be applied to the text for final display. Indices of the component words and phrases are built with links to the reference material and duplicate references are consolidated to conserve memory and storage requirements. A key feature of the		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		system format is the method by which	
		the original book text is indexed and	
		linked with the external references.	
		During the compile process an image of	
		the text is created. When the image is	
		created, the cuts are indexed based upon	
		the position offset from the beginning of	
		the text. The start and end points of the	
		cut text are recorded in a look-up table	
		along with the links to external	
		references. The number and type of links	
		for any component is dynamic. This	
		means that a single entry could have	
		several different references attached to	
		it, each containing different forms of	
		data.	
		The user interacts with the electronic	
		book using a pointing device. When the	
		user "clicks" within the text image, the	
		location of the pointer is determined.	
		The location is converted into a position	
		offset from the beginning of the text and	
		used to determine which component	
		word or phrase was selected. The	
		process involves comparing the offset	
		with the start and end values stored in	
		the look-up table as discussed above in connection with FIG. 2. When the offset	
		value falls between a component's start	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		and end points, a match is made and the external references can be resolved.")		
		Extrinsic Evidence:		
		Document Image Understanding: Geometric and Logical Layout, pp. 386-389. ("Document Image Understanding: Geometric and Logical Layout" by Robert Haralick 1994), describes how technical documents are opened and loaded into word processor software so that its structure may be determined, and the document may be cut/parsed into its logical discrete pieces; e.g., text (words and phrases) and non-text (images), portions, through steps such as segmentation. Refer to Page 386, Col. 1; Page 386, Col. 2; Page 387, Col. 1; Page 389, Col. 1.")		
		A Structure Editor for Abstract Document Objects, pp. 418, 412, and		
		430-435. ("A Structure Editor for Abstract Document Objects" by Gary Kimura (1986), is several decades old,		
		and describes how common operating systems support document viewers and editors. It describes how objects are selected by their absolute or relative		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		positions when opened, viewed and edited (See p 418). It also discloses how selection is done through use of keystrokes (p 422). Figure 16 describes the commonly used structure for these routine features in word processors and computer operating systems, with support for common editing and viewing operations (p 430- p 435) including type, move, copy, edit, delete, and other such commands on objects. It also explains the routine nature of display operations ("Formatting and viewing a document for editing or reading involves mapping its abstract representation to a concrete representation (formatting) and then to a display (viewing). The functions described here are used for both editing and reading; they are two distinct functions: • Viewing or visiting an object. This involves creating windows on the screen that correspond to the structure of the document •Putting a concrete image inside each window. The content of a window either corresponds to the object's raw data or is the result of a formatting operation.") (p. 422).")	

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		Document Formatting Systems , pp. 419-		
		420, 422, 432 and 444-449. ("Document		
		Formatting Systems: Survey, Concepts		
		and Issues", by Furuta et al (1982)		
		surveys document editing and viewing		
		systems available several decades ago		
		and the routine support for typical		
		operations from the operating systems		
		and the editors. It discloses allocating,		
		mapping and placing objects (p 420, p		
		447-449). ("Within the object model		
		framework, we can consider the major		
		operations of document processing as		
		mappings from objects to objects.		
		Editing operations are defined as		
		mappings from either abstract to abstract		
		objects or concrete to concrete objects.		
		Conventional text editing operations		
		map logical text objects to logical text		
		objects; for example, a text insertion or		
		deletion may be a mapping from strings		
		to strings or from paragraphs to		
		paragraphs. Also, editing operations on		
		an already formatted document produce		
		concrete objects from concrete objects.		
		An example of this type of editing is		
		interactively inserting or deleting text		
		from an already formatted paragraph,		
		thereby mapping concrete paragraphs to		
		concrete paragraphs; interactive layout		

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		operations such as moving formatted text, tables, or figures around a document are also in this category.") (p. 419)("The abstract document editor is a graphic version of the abstract object module and uses the window object module. The editor understands four classes of commands: structural viewing, content viewing, structural editing, and data editing.") (p. 432).")		
		Ten Years of Window Systems, pp. 35-37. ("Ten Years of Window Systems – A Retrospective View" by Warren Teitelman, discloses how window systems and languages such as Smalltalk directly supported "cut and paste", and how text could be selected and inserted through use of inbuilt commands (p 36). Also disclosed is the use of address spaces in Smalltalk 76 and Smalltalk 1980.")		
		The Text Editor Sam, pp.6-8 and 18. ("The Text Editor Sam: by Rob Pike, the use of addresses and offsets are disclosed (See p 6-8). The use of the mouse for interactive editing for the typical operations, such a select, delete, cut and paste, etc. is also disclosed in Figure 2 and Figure 4, for instance. The		

U.S. PATENT NO. RE 43,633			
Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
	routine use of pointers, offsets and addresses is also disclosed (See p 18).")		
	U.S. Patent Nos, 5,436,637 and 5,581,670. ("In US Patent 5,436,637, the use of standard operations such as cut, paste, open, copy, delete, is shown in Figure 6A-F (See also Col 2). Use of offsets and addresses is also disclosed (See Col 13).")		
	("The ability to convert bitmap positions to locations within the document data structures is disclosed in US Patent 5,581,670 (See Col 4 and Col 4). Typical operations such as cut & paste, delete and other selection operations are disclosed (See Col 33-36).")		
	Emacs - Version 18.59 and VI- Version 3.0. ("Emacs -Version 18.59 (ftp://ftp.gnu.org/old-gnu/emacs/) and VI (VIM) Version 3.0 (ftp://ftp.vim.org/pub/vim/unix) are examples of two known visual editors that were capable, in conjunction with a processor's operating system, of opening a document and parsing, indexing and displaying its words during editing. These visual editors likewise could select a display location where user		
	Claim(s)	Claim(s) Sentius' Proposed Construction and Supporting Evidence routine use of pointers, offsets and addresses is also disclosed (See p 18).") U.S. Patent Nos, 5,436,637 and 5,581,670. ("In US Patent 5,436,637, the use of standard operations such as cut, paste, open, copy, delete, is shown in Figure 6A-F (See also Col 2). Use of offsets and addresses is also disclosed (See Col 13).") ("The ability to convert bitmap positions to locations within the document data structures is disclosed in US Patent 5,581,670 (See Col 4 and Col 4). Typical operations such as cut & paste, delete and other selection operations are disclosed (See Col 33-36).") Emacs - Version 18.59 and VI-Version 3.0. ("Emacs -Version 18.59 (ftp://ftp.gnu.org/old-gnu/emacs/) and VI (VIM) Version 3.0 (ftp://ftp.vim.org/pub/vim/unix) are examples of two known visual editors that were capable, in conjunction with a processor's operating system, of opening a document and parsing, indexing and displaying its words during editing. These visual editors likewise could	

		U.S. PATENT NO. RE 43,633	
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		display location into a position or location within the document structure at which the edit should take place. Either of these visual editors would be a suitable base upon which programming could be added to achieve the claimed functionality of creating look-up table entries for certain words to be displayed in pop-up windows alongside the respective word when desired by a user.") Declaration of V. Madisetti, ¶38-47, 60, 75, 76-80.	
Sentius' Impact Statement validity of dependent Claim		that the construction of this term could have 633 Patent.	e a moderate impact on the issue of
Zoho's Impact Statement disclose sufficient structure		yould render the relevant claims invalid as in action.	ndefinite, because the specification fails to
7. "means for converting the display address of the selected discrete portion to an offset value from the beginning position address"	'633 patent: 17, 101	Function: "converting the display address of the selected discrete portion to an offset value from the beginning position address" Structure: "a computer having a visual editor and an electronic viewer module programmed to use an index to determine the offset value from the beginning position address of the	Subject to §112 ¶ 6. Function (agreed): "converting the display address of the selected discrete portion to an offset value from the beginning position address" Structure: None/indefinite Extrinsic Evidence: Declaration of Jon Weissman (¶¶ 59-70)

U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		selected horizontal and vertical coordinates, and equivalents thereof'	
		Intrinsic Evidence:	
		(See, User interface 32, user display 38, application program 42, data resource 34, offset index 35 and linked entities 36 of Fig. 1 together with mouse /position 200, look-up table 201/202, link 203 and display 204 of Fig. 2 of the '633 Patent and algorithm described in the '633 Patent at Col. 5:19-38 ("The database sources a grammar parser 23 and a link engine 22 that builds an index 21 which, 20 in turn, locates each textual and audio/video reference in the source material. The index provides a location for each reference in a database 12 that includes a relational database engine 15, and linkable entities, such as text references 16, audio references 17, graphic references, and the like. The link engine 22 outputs the selected text to a word list 28 derived from the input text file 10 and/or audio/video information 14, and also outputs the reference information 24, consisting of linkable entities 25, 26, 27, which are derived from the indexed	

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		creates a multi-media resource 30, such as a file 33 that was processed as described above to produce a data resource 34, an offset index 35, and linked entities 36 to the data resource for access by the user. A user interface 32 to the system includes an electronic viewer 43 that runs along with the system application program 42 and provides the following functional elements: index management 37, user display 38, a table of contents 39, a pop-up display 40, and a personal dictionary 41.");		
		6:48:67 ("FIG. 2 is a flow diagram in which the mechanism for indexing and linking text to external references is shown according to the invention. To find a reference to a particular word or other selected entry displayed on the screen, the user clicks the text that is viewed with a pointing device, such as a mouse (200). The click position is determined and used to calculate an offset value within the text (200). In the example shown in FIG. 2, the user clicks at a particular location, e.g. horizontal and vertical coordinates 100 and 75, respectively, and an offset value of 25 is		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		returned. The offset value is compared to the start and end position indices stored in a look-up table (201, 202). The link between the selected text and the external reference is resolved (203), and the external reference is retrieved and displayed to the user (204). In the example of FIG. 2 an offset of 25 is located at the look-up table location having a start point of 20 and an end point of 27 and is linked to text located at position 200. As can be seen from the look-up table (202), the link may be to text, sound, pictures, and video. In the example, the text linkage is to the English language word "Japanese economy".");		
		7:22-49 ("Compilation. After linking, the text and references are compiled. During compilation, the cut text is reassembled to create an image of the text that the end user sees. At this point additional formatting may be applied to the text for final display. Indices of the component words and phrases are built with links to the reference material and duplicate references are consolidated to conserve memory and storage requirements. A key feature of the		

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		system format is the method by which the original book text is indexed and linked with the external references. During the compile process an image of the text is created. When the image is created, the cuts are indexed based upon the position offset from the beginning of the text. The start and end points of the cut text are recorded in a look-up table along with the links to external references. The number and type of links for any component is dynamic. This means that a single entry could have several different references attached to it, each containing different forms of data. The user interacts with the electronic book using a pointing device. When the user "clicks" within the text image, the location of the pointer is determined. The location is converted into a position offset from the beginning of the text and used to determine which component word or phrase was selected. The process involves comparing the offset with the start and end values stored in the look-up table as discussed above in connection with FIG. 2. When the offset value falls between a component's start and end points, a match is made and the		

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		external references can be resolved."); and		
		8:28-9:6 ("Using the Electronic Viewer Module The electronic viewer module provides the following pulldown menus: File, Edit, Words, View. The File Menu includes: 1. Open (opens up a book for reading); 2. Close (closes a book); 3. Personal Dictionary (opens the personal dictionary); 4. Import Words (imports a tab delineated file into the personal dictionary); 5. Export Words (exports a tab delineated file into the personal dictionary); and Quit (quits the applications). The Edit Menu Includes: 1. Undo (undoes a previously deleted entry in the personal dictionary fields); 2. Cut (cuts a highlighted block of text in the personal dictionary fields); 3. Copy (copies the selected text into the clipboard in either the electronic viewer module or the personal dictionary); and 4. Paste (pastes the copied text into the target field in the personal dictionary). The Words Menu includes: 1. Find (displays the search dialogue box); 2.		
		Find Next (finds the next entry using the previously entered search word); 3. Next		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		(goes to the next word in the personal dictionary based on the current sort setting); 4. Prey (goes to the previous word in the personal dictionary basic based on the current sort setting); 5. Jump to Text (umps from the personal dictionary to the source of the word in the original text); and 6. Flash Words (displays the words in the personal dictionary in slide show fashion). The View Menu includes: 1. Browse (sets the program to Browse Mode, indicated by the arrow cursor); 2. Edit (sets the program to Edit Mode, indicated by the I-beam cursor); 3. Show Note Guides (displays the location of the Notes in the text of the viewer); 4. Show Notes (displays the Notes field in the personal dictionary); 5. Show Info (displays the Word Information and sort control button in the personal dictionary); and 6. Show Palette (displays the Word Display Palette with the electronic viewer module).")	
		Extrinsic Evidence: Sentius v. BlackBerry Agreed Claim	
		Construction Order, p.4 (" <u>Function</u> : converting the display address of the	

U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		selected discrete portion to an offset value from the beginning position address. Structure: a computer having a visual editor and an electronic viewer module programmed to use an index to determine the offset value from the beginning position address of the selected horizontal and vertical coordinates, and equivalents thereof. ('731 patent at 6:48-62; 7:29-39)") Sentius v Flyswat Claim Construction Order, p. 38 ("Based on the foregoing, "converting said address of said discrete portion to an offset value from said beginning address of said source material image" means "converting the screen coordinates of the selected discrete portion of the source material image into a byte offset value," with pure byte offset meaning "the distance from the starting point of data structure stored in some electronic storage medium" and its "value" determined by adding the value of the offset to a "base value starting position of the data structure.") Document Image Understanding:	

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		Geometric and Logical Layout, pp. 386-389. ("Document Image Understanding: Geometric and Logical Layout" by Robert Haralick 1994), describes how technical documents are opened and loaded into word processor software so that its structure may be determined, and the document may be cut/parsed into its logical discrete pieces; e.g., text (words and phrases) and non-text (images), portions, through steps such as segmentation. Refer to Page 386, Col. 1; Page 386, Col. 2; Page 387, Col. 1; Page 389, Col. 1.") A Structure Editor for Abstract Document Objects, pp. 418, 412, and 430-435. ("A Structure Editor for Abstract Document Objects" by Gary Kimura (1986), is several decades old, and describes how common operating systems support document viewers and editors. It describes how objects are selected by their absolute or relative positions when opened, viewed and edited (See p 418). It also discloses how selection is done through use of keystrokes (p 422). Figure 16 describes the commonly used structure for these routine features in word processors and		

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		computer operating systems, with support for common editing and viewing operations (p 430- p 435) including type, move, copy, edit, delete, and other such commands on objects. It also explains the routine nature of display operations ("'Formatting and viewing a document for editing or reading involves mapping its abstract representation to a concrete representation (formatting) and then to a display (viewing). The functions described here are used for both editing and reading; they are two distinct functions: • Viewing or visiting an object. This involves creating windows on the screen that correspond to the structure of the document		
		•Putting a concrete image inside each window. The content of a window either corresponds to the object's raw data or is the result of a formatting operation.") (p. 422).")		
		Document Formatting Systems, pp. 419-420, 422, 432 and 444-449. ("Document Formatting Systems: Suvey, Concepts and Issues", by Furuta et al (1982) surveys document editing and viewing systems available several decades ago and the routine support for		

U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		typical operations from the operating	
		systems and the editors. It discloses	
		allocating, mapping and placing objects	
		(p 420, p 447-449). ("Within the object	
		model framework, we can consider the	
		major operations of document	
		processing as mappings from objects to	
		objects. Editing operations are defined	
		as mappings from either abstract to abstract objects or concrete to concrete	
		objects. Conventional text editing	
		operations map logical text objects to	
		logical text objects; for example, a text	
		insertion or deletion may be a mapping	
		from strings to strings or from	
		paragraphs to paragraphs. Also, editing	
		operations on an already formatted	
		document produce concrete objects from	
		concrete objects. An example of this	
		type of editing is interactively inserting	
		or deleting text from an already	
		formatted paragraph, thereby mapping	
		concrete paragraphs to concrete	
		paragraphs; interactive layout operations	
		such as moving formatted text, tables, or	
		figures around a document are also in	
		this category.") (p. 419)("The abstract	
		document editor is a graphic version of	
		the abstract object module and uses the	
		window object module. The editor	

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		understands four classes of commands: structural viewing, content viewing, structural editing, and data editing.")(p. 432).")		
		Ten Years of Window Systems, pp. 35-37. ("Ten Years of Window Systems – A Retrospective View" by Warren Teitelman, discloses how window systems and languages such as Smalltalk directly supported "cut and paste", and how text could be selected and inserted through use of inbuilt commands (p 36). Also disclosed is the use of address spaces in Smalltalk 76 and Smalltalk 1980.")		
		The Text Editor Sam, pp.6-8 and 18. ("The Text Editor Sam: by Rob Pike, the use of addresses and offsets are disclosed (See p 6-8). The use of the mouse for interactive editing for the typical operations, such a select, delete, cut and paste, etc. is also disclosed in Figure 2 and Figure 4, for instance. The routine use of pointers, offsets and addresses is also disclosed (See p 18).")		
		U.S. Patent Nos, 5,436,637 and 5,581,670. ("In US Patent 5,436,637, the use of standard operations such as cut, paste, open, copy, delete, is shown in		

	U.S. PATENT NO. RE 43,633			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		Figure 6A-F (See also Col 2). Use of offsets and addresses is also disclosed (See Col 13)")		
		("The ability to convert bitmap positions to locations within the document data structures is disclosed in US Patent 5,581,670 (See Col 4 and Col 4). Typical operations such as cut & paste, delete and other selection operations are disclosed (See Col 33-36).")		
		Emacs - Version 18.59 and VI- Version 3.0. ("Emacs - Version 18.59 (ftp://ftp.gnu.org/old-gnu/emacs/) and VI (VIM) Version 3.0 (ftp://ftp.vim.org/pub/vim/unix) are examples of two known visual editors that were capable, in conjunction with a processor's operating system, of opening a document and parsing, indexing and		
		displaying its words during editing. These visual editors likewise could select a display location where user input was received and convert that display location into a position or location within the document structure at which the edit should take place. Either of these visual editors would be a suitable base upon which programming could be added to achieve the claimed		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		entries for certain words to be displayed in pop-up windows alongside the respective word when desired by a user")	
		Declaration of V. Madisetti, ¶38-47, 60, 81-86.	

Sentius' Impact Statement: Sentius believes that the construction of this term will have a substantial impact on the issue of validity of system Claims 17 and 101 of the '633 Patent.

Zoho's Impact Statement: Zoho's proposal would render the relevant claims invalid as indefinite, because the specification fails to disclose sufficient structure for the claimed function.

B. U.S. Patent No. 7,672,985

U.S. PATENT NO. 7,672,985			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
8. "data objects associated with a term database" / "data objects associated with the term database" /	'985 patent: 1, 11, 20, 21	"computer readable data structures that include data from [a/the] [term] database" Intrinsic Evidence:	"computer-readable data structures that include data from [a/the] [term] database and rules for processing the one or more documents and linking content with identified terms"
"data objects associated with a database"		('985 Patent, 4:13-26 ("RichLink Term Database 240. This module 240 is a library that contains all terms and associated content that can be sorted and queried, using business criteria to organize into dictionaries of similar	Intrinsic Evidence: '985 Patent, Abstract; 4:13-26; 8:51-58; 9:1-13; 9:18-58; 9:59-10:14; 12:36-49; Figs. 9B; Sept. 14, 2009 Response to

	U.S. PATENT NO. 7,672,985			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		information. Content types such as text, image, Sound, Video, mixed media, and forms may be stored in this database. There is a one-to-many relationship developed between matching terms and content associated with matching terms. Content may be identified in a number of ways to allow automated identification of the dictionary to which it belongs. Examples of identification information are the publisher name, sponsor name, site name, readership, and sponsorship dates. Content may also be associated with metadata to allow automated identification of the category to which it belongs."); 8:51-58 ("The Richlink Processor interacts with the Template Object 930 to identify the rules that should be used in processing and the Lexicon Object 920 to identify what terms should be tagged in the Source text. Tags in the page identify whether a page should be processed by the RichLink Processor or not, denote sections of a page to be processed, and indicate the template that should be used in processing that page/section."); 9:1-10:14 ("When a file is sent to the RichLink Processor, several operations can be optionally run on the text. The text may be parsed, the document categorized, and page-level meta data	Office Action at 11-12, 13-14; Dec. 1, 2009 Examiner Interview Summary; Dec. 28, 2009 Notice of Allowance at 2-10. Extrinsic Evidence: Materials from prior Sentius litigations, including: Inventor and expert depositions transcripts from prior litigations.	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		tags added to the page. The document content may be summarized. Matches between terms on the page and terms occurring in the Lexicon Object for dictionaries specified by the template used with this page are identified. A tag is created around matched terms if meta data or other criteria are met. Typically, this tag is a hyperlink that leads to additional annotational content, however additional tag structures can be used. Finally, the document may be inserted into the Term Database as annotational content for identified category key words. A user interface is provided which allows administrative access to process and queue controls, view, search and sort log data, and process statistics. Lexicon Object 920 The Lexicon Object provides a local representation of the content of the Term Database for use by the RichLink Processor 910 so a direct connection to the Term Database may be on a remote server from the RichLink Processor. The Lexicon Object contains data required to match terms and create tags Such as a representation of the terms in the database optimized for fast matching by the RichLink Processor, the TermID from the Term Database, and other Term Database content for		

	U.S. PATENT NO. 7,672,985			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		which fast access is required, such as annotation content. The Lexicon Object may be stored once on a single server and accessed by all active Richlink Processor instances running on that server. Or it may be stored once on a central server and accessed by active RichLink Processor instances on multiple servers. It can contain lexicons for multiple dictionaries in a single object instance. Template Object 930 The Template Object provides a local representation of the Template that contains the rules for processing and linking a file so a direct connection to the Template Database is not required and the Template Database may be on a remote server from the RichLink Processor. The Template Object contains the rules required by the RichLink Processor such as dictionaries used for linking or as filters (stop word lists), metadata criteria that must be met when making a match, the format of the tag to be inserted before and after a matched term including macros to be expanded by the RichLink Processor with data specific to the matched term, run-time processing options such as limiting the number of matches found or turning Stemming on and off, and any code required to be placed into the page to enable operation of the RichLink Content Window or other applications.		

	U.S. PATENT NO. 7,672,985			
Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		The Template Object may be stored once on a single server and accessed by all active Richlink Processor instances running on that server. Or it may be stored once on a central server and accessed by active RichLink Processor instances on multiple servers. It can contain multiple templates in a single object instance. Lexicon and Template Manager 940 The Lexicon and Template Manager insures that the Lexicon Object 920 and Template Object 930 are synchronized with the Term and Template Databases. When the server is started, the manager is automatically launched. It accesses the Term Database to obtain the latest version of the Lexicon Object for that server and accesses the Template Database to obtain the latest version of the Template Object for that server, as shown in FIG. 9B. The Lexicon Object and Template. Object are then stored in the server's memory where they can be accessed by any active Richlink Processor instances running on that server. The Lexicon and Template Manager must log into the databases. Preferences are enforced based on that login so the server only obtains lexicons and templates for which they have privileges. The Lexicon and Template Manager may also be triggered via remote request, such as an HTTP request, so		

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence
		manual refreshes of the Lexicon Object and Template Object can occur while the server is running. The Lexicon and Template Manager also includes a timer function to trigger scheduled refreshes of the Lexicon Object and Template Object."); and Figures 9A and 9B)	
		Extrinsic Evidence:	
		Declaration of V. Madisetti, ¶48-50, 60, 89-90, 92, and 136.	
	ons are included in	construction of these terms differs from Sethe Court's construction, that would have a where these terms appear.	
		construction will establish that Zoho does not k dictionaries—do not include any rules for	
9. "parsing one or more documents to identify at least one term based on at least one rule"	'985 patent: 1, 11, 20, 21	"breaking one or more documents into segments to identify at least one term based on at least one rule" breaking one or more source documents into segments to identify at least one term based on at least one predetermined	"breaking one or more documents into segments and creating an index of those segments and using at least one rule to identify at least one term in the index" "breaking one or more source documents into segments and creating an index of
"parsing one or more source documents to identify at least one term based on one or more		rule DICTIONARY/TREATISE	into segments and creating an index of those segments and using at least one predetermined rule to identify at least one term in the index"
predetermined rules"		DEFINITIONS: Microsoft Press Computer Dictionary.	Intrinsic Evidence:

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		The Comprehensive Standard For Business, School, Library, and Home (1994), page 292 ("to break input into smaller chunks so that a program can act upon the information")	2:21-30; 6:50-7:4; 9:1-13; Fig. 7; Dec. 1, 2009 Examiner Interview Summary; Dec. 28, 2009 Notice of Allowance at 2-10. Extrinsic Evidence:	
		Intrinsic Evidence:	Materials from prior Sentius litigations,	
		('985 Patent) Figures 1, 7, 9A and 9B and 2:21-26 ("The process begins by identifying terms of interest within a corpus of documents. Term identification may be accomplished by crawling and parsing the corpus to select terms through application of rules, such as, a term was not previously in the database, an unusually frequent use of the term, the term is an article, or the term is an unusual part of speech."); 6:53-57 ("The term finder module performs a full text index of a corpus of documents such as a website and generates a list of terms that may be of interest 700. The term finder is directed to a top-level folder and then recursively crawls through that folder and every sub-folder searching for all files that match a specified file type or types."); 6:57-60 ("Files matching the specified types are parsed 710 using natural language processing to tokenize the text into significant objects such as words and phrases until a full index of all	including: Inventor and expert depositions transcripts from prior litigations.	

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		words and phrases on the site is created."); 8:51-58 ("The Richlink Processor interacts with the Template Object 930 to identify the rules that should be used in processing and the Lexicon Object 920 to identify what terms should be tagged in the Source text. Tags in the page identify whether a page should be processed by the RichLink Processor or not, denote sections of a page to be processed, and indicate the template that should be used in processing that page/section.");		
		9:1-13 ("When a file is sent to the RichLink Processor, several operations can be optionally run on the text. The text may be parsed, the document categorized, and page-level meta data tags added to the page. The document content may be summarized. Matches between terms in the page and terms occurring in the Lexicon Object for dictionaries specified by the template used with this page are identified. A tag is created around matched terms if meta data or other criteria are met. Typically, this tag is a hyperlink that leads to additional annotational content for identified category key-words.");		
		9:37-42 ("The Template Object provides a local representation of the Template that contains the rules for processing and		

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		linking a file so a direct connection to the Template Database is not required and the Template Database may be on a remote server from the RichLink Processor.");		
		'349 Patent, Claims 1, 31		
		EXTRINSIC EVIDENCE: Document Image Understanding: Geometric and Logical Layout, pp. 386- 389. ("Document Image Understanding: Geometric and Logical Layout" by Robert Haralick 1994), describes how technical documents are opened and loaded into word processor software so that its structure may be determined, and the document may be cut/parsed into its logical discrete pieces; e.g., text (words and phrases) and non-text (images), portions, through steps such as segmentation. Refer to Page 386, Col. 1; Page 386, Col. 2; Page 387, Col. 1; Page 389, Col. 1.")		
		A Structure Editor for Abstract Document Objects, pp. 418, 412, and 430-435. ("A Structure Editor for		
		Abstract Document Objects" by Gary Kimura (1986), is several decades old, and describes how common operating		
		systems support document viewers and		

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		editors. It describes how objects are selected by their absolute or relative positions when opened, viewed and edited (See p 418). It also discloses how selection is done through use of keystrokes (p 422). Figure 16 describes the commonly used structure for these routine features in word processors and computer operating systems, with support for common editing and viewing operations (p 430- p 435) including type, move, copy, edit, delete, and other such commands on objects. It also explains the routine nature of display operations ("Formatting and viewing a document for editing or reading involves mapping its abstract representation to a concrete representation (formatting) and then to a display (viewing). The functions described here are used for both editing and reading; they are two distinct functions: • Viewing or visiting an object. This involves creating windows on the screen that correspond to the structure of the document •Putting a concrete image inside each window. The content of a window either corresponds to the object's raw data or is		

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		the result of a formatting operation.") (p. 422).")		
		Document Formatting Systems, pp. 419-420, 422, 432 and 444-449. ("Document Formatting Systems: Survey, Concepts and Issues", by Furuta et al (1982) surveys document editing and viewing systems available several decades ago and the routine support for typical operations from the operating systems and the editors. It discloses allocating, mapping and placing objects (p 420, p 447-449). ("Within the object model framework, we can consider the major operations of document processing as mappings from objects to objects. Editing operations are defined as mappings from either abstract to abstract objects or concrete to concrete objects. Conventional text editing operations map logical text objects to logical text objects; for example, a text insertion or deletion may be a mapping from strings to strings or from paragraphs to paragraphs. Also, editing operations on an already formatted document produce concrete objects from concrete objects. An example of this type of editing is		
		interactively inserting or deleting text from an already formatted paragraph,		

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		thereby mapping concrete paragraphs to concrete paragraphs; interactive layout operations such as moving formatted text, tables, or figures around a document are also in this category.") (p. 419)("The abstract document editor is a graphic version of the abstract object module and uses the window object module. The editor understands four classes of commands: structural viewing, content viewing, structural editing, and data editing.")(p. 432).")		
		Ten Years of Window Systems, pp. 35-37. ("Ten Years of Window Systems – A Retrospective View" by Warren Teitelman, discloses how window systems and languages such as Smalltalk directly supported "cut and paste", and how text could be selected and inserted through use of inbuilt commands (p 36). Also disclosed is the use of address spaces in Smalltalk 76 and Smalltalk 1980.")		
		The Text Editor Sam, pp.6-8 and 18. ("The Text Editor Sam: by Rob Pike, the use of addresses and offsets are disclosed (See p 6-8). The use of the mouse for interactive editing for the typical operations, such a select, delete, cut and paste, etc. is also disclosed in		

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		Figure 2 and Figure 4, for instance. The routine use of pointers, offsets and addresses is also disclosed (See p 18).")		
		U.S. Patent Nos, 5,436,637 and 5,581,670. ("In US Patent 5,436,637, the use of standard operations such as cut, paste, open, copy, delete, is shown in Figure 6A-F (See also Col 2). Use of offsets and addresses is also disclosed (See Col 13)") ("The ability to convert bitmap positions to locations within the document data structures is disclosed in US Patent 5,581,670 (See Col 4 and Col 4). Typical operations such as cut & paste, delete and other selection operations are disclosed (See Col 33-36).")		
		Emacs - Version 18.59 and VI- Version 3.0. ("Emacs -Version 18.59 (ftp://ftp.gnu.org/old-gnu/emacs/) and VI (VIM) Version 3.0 (ftp://ftp.vim.org/pub/vim/unix) are examples of two known visual editors that were capable, in conjunction with a processor's operating system, of opening a document and parsing, indexing and displaying its words during editing. These visual editors likewise		

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		could select a display location where user input was received and convert that display location into a position or location within the document structure at which the edit should take place. Either of these visual editors would be a suitable base upon which programming could be added to achieve the claimed functionality of creating look-up table entries for certain words to be displayed in pop-up windows alongside the respective word when desired by a user.") Declaration of V. Madisetti, ¶18, 47, 50, 59-60, 80, 95-98, 103-109, 123, 127-131, 140.	
	ons are included in	construction of these terms differs from Ser the Court's construction, that would have a here these terms appear.	
		onstruction will establish that Zoho does no ument segments and use a rule to identify a	
10. "lexicon object"	'985 patent: 8, 18	"representation of content used to match terms with content or to create tags to assist in matching terms to content"	"computer-readable data structure that provides a local representation of the content of the term database and data required to match terms and create tags"
		Intrinsic Evidence:	Intrinsic Evidence:
		Abstract: "Data Objects that represent	

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Disputed Term	Claim(s)	Sentius' Proposed Construction and Supporting Evidence	Zoho's Proposed Construction and Supporting Evidence	
		the contents of the database and templates are syndicated to remote servers running a processing engine." ('985 Patent, 8:51-58, ("The Richlink Processor interacts with the Template Object 930 to identify the rules that should be used in processing and the Lexicon Object 920 to identify what terms should be tagged in the Source text. Tags in the page identify whether a page should be processed by the RichLink Processor or not, denote sections of a page to be processed, and indicate the template that should be used in processing that page/section."); 9:17-35 ("Lexicon Object 920 The Lexicon Object provides a local representation of the content of the Term Database for use by the RichLink Processor 910 so a direct connection to the Term Database is not required and the Term Database may be on a remote server from the RichLink Processor. The Lexicon Object contains data required to match terms and create tags Such as a representation of the terms in the database optimized for fast matching by the RichLink Processor, the TermID from the Term Database, the DictionaryID from the Term Database, and other Term Database content for which fast access is required, such as annotation content.	Abstract; 4:13-26; 8:51-58; 9:1-13; 9:18-58; 9:59-10:14; 12:36-49; Figs. 9B; Sept. 14, 2009 Response to Office Action at 11-12, 13-14; Dec. 1, 2009 Examiner Interview Summary; Dec. 28, 2009 Notice of Allowance at 2-10. Extrinsic Evidence: Materials from prior Sentius litigations, including: Inventor and expert depositions transcripts from prior litigations.	

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		The Lexicon Object may be stored once on a single server and accessed by all active Richlink Processor instances running on that server. Or it may be stored once on a central server and accessed by active RichLink Processor instances on multiple servers. It can contain lexicons for multiple dictionaries in a single object instance."); 9:59-10:14 ("Lexicon and Template Manager 940 The Lexicon and Template Manager insures that the Lexicon Object 920 and Template Object 930 are synchronized with the Term and Template Databases. When the server is started, the manager is automatically launched. It accesses the Term Database to obtain the latest version of the Lexicon Object for that server and accesses the Template Database to obtain the latest version of the Template Object for that server, as shown in FIG. 9B. The Lexicon Object and Template Object are then stored in the server's memory where they can be accessed by any active Richlink Processor instances running on that server. The Lexicon and Template Manager must log into the databases. Preferences are enforced based on that login so the	and Supporting Evidence	
		server only obtains lexicons and templates for which they have privileges.		

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		The Lexicon and Template Manager may also be triggered via remote request, such as an HTTP request, so manual refreshes of the Lexicon Object and Template Object can occur while the server is running. The Lexicon and Template Manager also includes a timer function to trigger scheduled refreshes of the Lexicon Object and Template Object."); and Fig. 9A and 9B) Extrinsic Evidence: Declaration of V. Madisetti, ¶60, 89, 91-94, 97 and 133.	

Sentius' Impact Statement: Sentius believes that the construction of this term could potentially impact the issue of infringement of dependent Claims 8 and 18 of the '985 Patent.

Zoho's Impact Statement: Adopting Zoho's construction will establish that Zoho does not infringe the '985 patent because the purported data objects in its system—spellcheck dictionaries—do not include data required to match terms and create tags.